

LEARNING PLAN

<p>Exploratory Activities</p> <p>Folding Paper Activity (McDougal Littell, Algebra 2) Clapping Scale—Raise the Roof! (Original Work) Mira—Inverses, introduction to Logarithms (Original Work)</p>	<p>CONCEPT</p> <p>Logarithm and Exponential Functions</p> <p>Time Frame: 2-3 Weeks (for Algebra 2/Pre-Calculus)</p>
<p>Concept Development Activities</p> <ul style="list-style-type: none"> • Growth and Decay Problems (Prentice Hall, Algebra and Trigonometry: Enhanced with Graphing Utilities) • Transformations of Exponential Equations (Original Work) • Discovery of Logarithmic Properties Using Exponential Properties (Original Work) • Richter Scale (Merrill, Algebra Two with Trigonometry) 	<p>Materials and Resources</p> <p>Paper Miras Graphing Calculators Markers Graph Paper Large Graph Paper (presentation) Boswell, Kanold, Larson, and Stiff. (2001). <u>Algebra 2</u>. (pp.473). Evanston, IL. McDougal Littell Inc. Sullivan and Sullivan. (2000). <u>Algebra and Trigonometry: Enhanced with Graphing Utilities</u>. (pp.387-392). Upper Saddle River, NJ. Prentice Hall. Foster, Roth, and Winters. (1983). <u>Algebra Two with Trigonometry</u>. (pp.357). Columbus, OH. Merrill Publishing Co.</p>
<p>Basic Facts and Standard Algorithms Formalized</p> <p>Transformations—Exponential and Logarithmic Solving Exponential equations with a common base graphically and algebraically Switching Forms—Exponential and Logarithmic Simplifying and expanding expressions using the Logarithmic Properties Solving Logarithmic Equations with Logarithmic Properties and Algebraically Solving Exponential Equations Using Logarithms Discussion of the Logistic Curve</p>	<p>Originality and Creativity <i>Student Products</i></p> <p>The Exponentially Logarithmic Corporation Written Investors Pitch Letter</p> <p>Verbal Radio Advertisement (Jingle)</p> <p>Kinesthetic TV Commercial</p>
<p>Assessment</p> <p>Group work/Presentations (see attachments) Journals (see attachment) Homework Quizzes Test</p>	<p>Visual Logo Design</p> <p>See Attachment for further details of the project</p>
<p>Related TEKS/TAKS</p> <p>TEKS—111.33 a(3); 111.33 b(1) A, B; 111.33 f 1—5 and 111.35 2 A,C; 111.35 3 A,C</p> <p>TAKS—Ab1, Ab3, Ab4, Ad3, 8.15, 8.16</p>	

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